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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,175	02/26/2004	Lee Desmond Capper	ATOIP0109US	9900
7590 Thomas W. Adams Renner, Otto, Boisselle & Sklar, LLP Nineteenth Floor 1621 Euclid Avenue Cleveland, OH 44115-2191			EXAMINER WONG, EDNA	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 05/05/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/789,175

Applicant(s)

CAPPER ET AL.

Examiner

EDNA WONG

Art Unit

1795

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 43, 44, 46-53 and 55-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 43, 44, 46-53 and 55-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

This is in response to the Amendment dated March 13, 2008. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Response to Arguments

Claim Objections

Claim **6** has been objected to because of minor informalities.

The rejection of claim 6 has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 112

Claims **3-4, 6, 46-47, 50, 56-57 and 60** have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 3-4, 6, 46-47, 50, 56-57 and 60 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 103

I. Claims **1-4 and 6-10** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Irie et al.** (US Patent No. 4,581,107) in combination with **GB 2,104,920** ('920) and **Osetrova** ("Use of Ethylenediamine in Electroplating", *Sbornik Nauchnykh Trudov - Institut Tsvetnykh Metallov im. M. I. Kalinina* (1960), Vol. 33, pp.

396-399).

The rejection of claims 1-4 and 6-10 under 35 U.S.C. 103(a) as being unpatentable over Irie et al. in combination with GB 2,104,920 ('920) and Osetrova is as applied in the Office Action dated February 13, 2008 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that none of the cited references are believed to disclose or suggest the inclusion of the ethylenediamine or its methyl-substituted derivatives; propylenediamine or its methyl-substituted derivatives; diethylenetriamine or its methyl-substituted derivatives; or a polymer of an aliphatic amine, in addition to and together with the other components specified in the presently pending claims. As noted, Osetrova provides the simple salts [of zinc, nickel, etc.] with ethylenediamine. In Applicants' claims, the ethylenediamine or its methyl-substituted derivatives; propylenediamine or its methyl-substituted derivatives; diethylenetriamine or its methyl-substituted derivatives; or a polymer of an aliphatic amine is provided to the bath in addition to the zinc salts and nickel salts specified in the claims.

In response, Irie teaches zinc chloride, sulfates, nitrates and acetates; and nickel chloride, sulfates, nitrates and acetates (col. 2, lines 56-64; and col. 3, lines 39-44).

Osetrova teaches replacing sulfate and cyanide electrolytes with ethylenediamine (abstract).

Although the ethylenediamine disclosed by Osetrova is not taught as being provided in addition to zinc chloride, sulfates, nitrates or acetates and nickel chloride,

sulfates, nitrates or acetates, it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in the prior art (MPEP § 2144.06).

II. Claims **1, 3-8 and 10** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 64-68488** ('488) in combination with **GB 2,104,920** ('920) and **Osetrova** ("Use of Ethylenediamine in Electroplating", *Sbornik Nauchnykh Trudov - Institut Tsvetnykh Metallov im. M. I. Kalinina* (1960), Vol. 33, pp. 396-399).

The rejection of claims 1, 3-8 and 10 under 35 U.S.C. 103(a) as being unpatentable over JP 64-68488 ('488) in combination with GB 2,104,920 ('920) and Osetrova is as applied in the Office Action dated February 13, 2008 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

III. Claims **43-44, 46-47 and 49-53** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Irie et al.** (US Patent No. 4,581,107) in combination with **GB 2,104,920** ('920) and **Osetrova** ("Use of Ethylenediamine in Electroplating", *Sbornik Nauchnykh Trudov - Institut Tsvetnykh Metallov im. M. I. Kalinina* (1960), Vol. 33, pp.

396-399).

The rejection of claims 43-44, 46-47 and 49-53 under 35 U.S.C. 103(a) as being unpatentable over Irie et al. in combination with GB 2,104,920 ('920) and Osetrova is as applied in the Office Action dated February 13, 2008 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

IV. Claims **43, 46-48 and 50-53** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 64-68488** ('488) in combination with **GB 2,104,920** ('920) and **Osetrova** ("Use of Ethylenediamine in Electroplating", *Sbornik Nauchnykh Trudov - Institut Tsvetnykh Metallov im. M. I. Kalinina* (1960), Vol. 33, pp. 396-399).

The rejection of claims 43, 46-48 and 50-53 under 35 U.S.C. 103(a) as being unpatentable over JP 64-68488 ('488) in combination with GB 2,104,920 ('920) and Osetrova is as applied in the Office Action dated February 13, 2008 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

V. Claims **55-57 and 59-63** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Irie et al.** (US Patent No. 4,581,107) in combination with **GB**

2,104,920 ('920) and **Osetrova** ("Use of Ethylenediamine in Electroplating", *Sbornik Nauchnykh Trudov - Institut Tsvetnykh Metallov im. M. I. Kalinina* (1960), Vol. 33, pp. 396-399).

The rejection of claims 55-57 and 59-63 under 35 U.S.C. 103(a) as being unpatentable over Irie et al. in combination with GB 2,104,920 ('920) and Osetrova is as applied in the Office Action dated February 13, 2008 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

VI. Claims **55-58** and **60-63** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 64-68488** ('488) in combination with **GB 2,104,920** ('920) and **Osetrova** ("Use of Ethylenediamine in Electroplating", *Sbornik Nauchnykh Trudov - Institut Tsvetnykh Metallov im. M. I. Kalinina* (1960), Vol. 33, pp. 396-399).

The rejection of claims 55-58 and 60-63 under 35 U.S.C. 103(a) as being unpatentable over JP 64-68488 ('488) in combination with GB 2,104,920 ('920) and Osetrova is as applied in the Office Action dated February 13, 2008 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

Response to Amendment

Claim Rejections - 35 USC § 112

Claims **6, 50 and 60** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6

lines 19-21, recite "wherein Z independently is one or more of H, an alkali metal ion, and Z₂ is optionally an alkaline earth metal ion."

Claim 50

lines 19-21, recite "wherein Z independently is one or more of H, an alkali metal ion, and Z₂ is optionally an alkaline earth metal ion."

Claim 60

lines 19-21, recite "wherein Z independently is one or more of H, an alkali metal ion, and Z₂ is optionally an alkaline earth metal ion."

It is unclear what the scope of "Z independently is one or more of **H, an** alkali metal ion" is. Should it be -- Z independently is one or more of H **and** an alkali metal ion --?

If "Z₂ **is optionally** an alkaline earth metal ion", then what is it when it is not

optional?

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDNA WONG whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edna Wong/
Primary Examiner
Art Unit 1795

EW
May 4, 2008